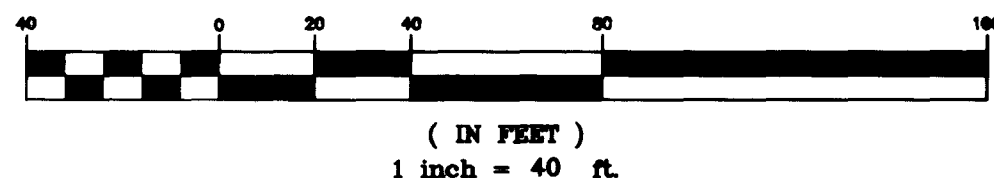


GRAPHIC SCALE



FIRE FLOW DATA

FIRE FLOW REQUIREMENT IS 1625 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:
LARGEST SQUARE FOOTAGE: 31,500
LARGEST AREA BETWEEN AREA SEPARATION WALLS: 31,500
HEIGHT: SINGLE STORY
TYPE OF CONSTRUCTION: V (1 HOUR)
EXPOSURES: N A
SPRINKLER SYSTEM: YES
OCCUPANCY: COMMERCIAL
ROOF CONSTRUCTION: PANALIZED WOOD DECK

CITY OF LAS VEGAS FIRE DEPARTMENT
APPROVED

BY: [Signature] DATE: 5-8-97

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.
FIRE FLOW 1625 G.P.M. AT 20 P.S.I. RESIDUAL.

LEGAL DESCRIPTION

BEING A PORTION OF THE NORTHWEST 1/4 OF THE SOUTH WEST 1/4 OF SECTION 22 TOWNSHIP 20 S, RANGE 60 E, MDM

BENCHMARK N.A.V.D. 1988

CITY OF LAS VEGAS BENCHMARK NO. 22 STA. 0100 22E6 RIVT AND PLATE IN TOP OF CURB ON LAKE MEAD BLVD. 400' WEST OF ROCK SPRINGS DR. NORTH CURB LINE.

ELEVATION 721.9141 METERS. (2368.479 U.S. SURVEY FEET)

METERS x (3937 / 1200) = U.S. SURVEY FEET

1. THE ELEVATIONS SHOWN HEREON ARE BASED ON FEET. AVERAGE FLOW SEWER CONTRIBUTION

Table with columns: BLDG NO., TOILETS, LAVATORIES, SHOWERS, FIXTURES. Includes BLDG NO. 1, 2, 12 and GRAND TOTAL.

FIXTURE TOTAL 98
BLDG NO. 3-11 & 13-15 6 FIXTURES EACH(ESTIMATED) 66
GRAND TOTAL 164 FIXTURES = 164 x 1.0 ERU/FIXTURES(1ERU = 250 GPM)
164 ERU x 250 GPM = 41,000 GPM

PEAK FLOW SEWER CONTRIBUTION

AVERAGE FLOW = 41,000 GPM
41,000 GPM AVERAGE DAILY FLOW x 3.5 PEAKING FACTOR = 143,500 GPM

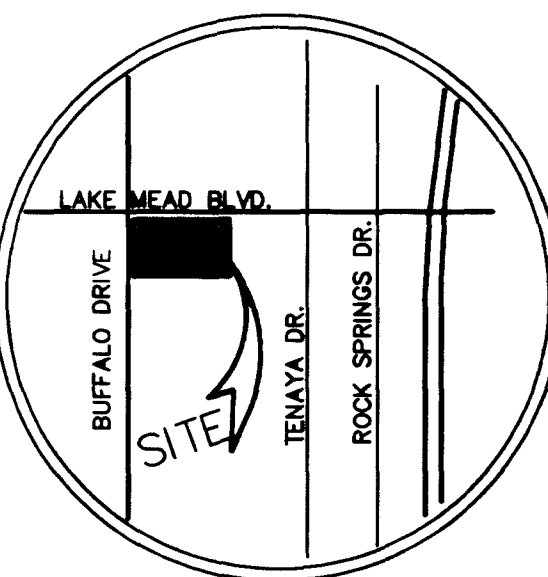
LEGEND

- RETAINING BLOCK WALL
BLOCK WALL
EXISTING IMPROVEMENTS
SCARP
SWALE
SETBACK LINE
EDGE OF PAVEMENT
FINISHED FLOOR
FINISH GRADE
FLOW LINE
TOP OF CURB
TOP OF BERM
PAD GRADE
RELOCATED STREET LIGHT

CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

- NOTE: ALL CURBS TO BE PAINTED RED
1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT HYDRANT SPECIFICATIONS, AND ORDINANCE #3944.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
A. KENNEDY GUARDIAN
B. MUELLER A-423 CENTURIAN
C. CLOW MODEL 2546 MEDALLION
3. ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
4. CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3944 TO IDENTIFY FIRE HYDRANT LOCATIONS.
5. CALL THE LAS VEGAS FIRE DEPARTMENT AT 228-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
6. PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE #3944 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
7. A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT. THE PERMIT AND CONTRACTORS MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER PRIOR TO ANY WORK BEGINNING.
8. PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.
9. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
10. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
11. FIRE HYDRANT SPACING:
RESIDENTIAL - 500 FEET UNSPRINKLERED, 1000 FEET SPRINKLERED.
COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, COMMERCIAL, INCLUDING MULTI-FAMILY - 600 FEET SPRINKLERED.
12. WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS, WHERE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF STRUCTURES, FIRE HYDRANTS SHALL BE SPACED AT MAXIMUM 1,000 FOOT SPACING TO PROVIDE FOR TRANSPORTATION HAZARD.
13. NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF CULL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CULL-DE-SAC.
14. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
15. TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE 4 OR MORE FIRE HYDRANTS INSTALLED ON A SINGLE SYSTEM.
16. NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
17. FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET PROVIDED NO PARKING IS ALLOWED, NOT LESS THAN 28 FEET IF PARALLEL PARKING IS ALLOWED ON ONE SIDE, AND NOT LESS THAN 36 FEET IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. VERTICAL CLEARANCE SHALL BE NOT LESS THAN 13 FEET 6 INCHES.
18. THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE SHALL NOT BE LESS 45 FEET OUTSIDE RADIUS AND 22 FEET INSIDE RADIUS.
19. A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. (SEE EXCEPTIONS IN UFC 94, SECTION 902.2).
20. ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LANES PUBLIC OR PRIVATE IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. SEE ORDINANCE #3944.
21. ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FEET ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FEET OR LESS THAN 6 FEET FROM ROADWAY LEVEL. THE CURBS ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
22. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.

VICINITY MAP



PUBLIC OFF-SITE QUANTITIES

- RELOCATE STREET LIGHTS 3 EA.
RELOCATE CABLE TV PULLBOX 1 EA.

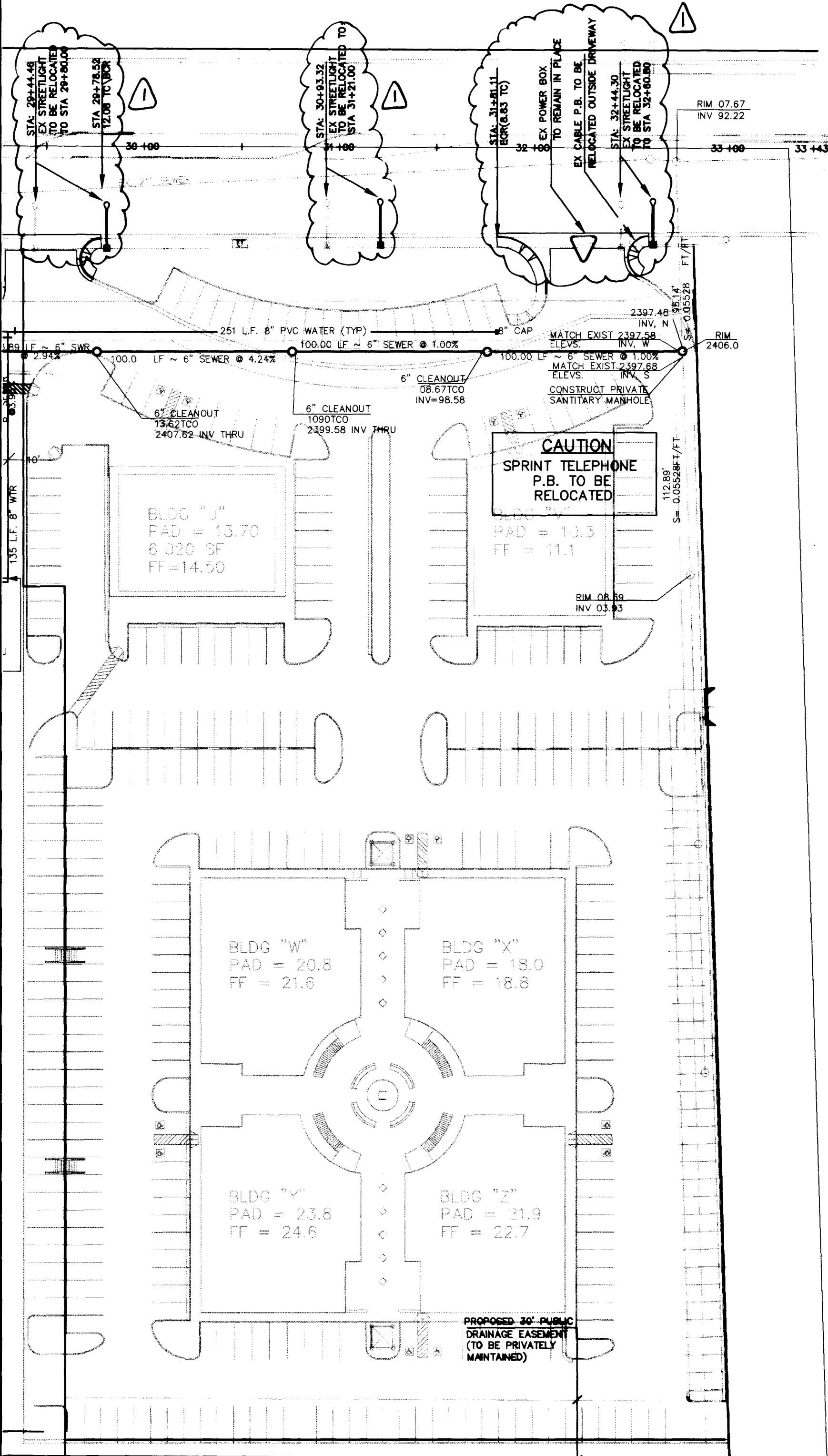
PRIVATE ON-SITE QUANTITIES

- 6" SEWER CLEANOUTS 4 EA.
8" PVC WATER 440 L.F.
48" MANHOLE 1 EA.
6" PVC SEWER 520 L.F.
8" GATE VALVES 1 EA.
8" X 6" TEE 1 EA.
2" BLOW OFF VALVE 1 EA.

LAS VEGAS VALLEY WATER DIST. NOTES

- 1. No work shall begin until the water plans have been released for construction by the LVVWD. Following water plan approval, 48 hour notice shall be given to the LVVWD COMMUNICATION SUPPORT CENTER (258-7171) prior to the start of construction. Notice must be given by 2:00 pm. the business day prior to a LVVWD inspection.
2. All work shall conform to LVVWD Standard Plates, Drawings and Specifications, and the uniform design and construction standards for water distribution systems(UDACS), latest edition.
3. All work, except as modified by these plans or by note 2, shall be done in accordance with the most current draft or edition of the Uniform Standard Specifications for Public Works Construction Offsite Improvement, Clark County Area.
4. A single pipe material shall be used throughout the project unless otherwise approved by the LVVWD.
5. All service laterals two (2) inches in diameter and smaller shall be copper tubing with LVVWD approved service laterals.
6. All water meter boxes shall be located outside driveway areas.
7. All valves shall be located outside driveways, alley gutters and curb gutters.
8. The following requirements must be met in the event a water line and sanitary or storm sewer line cross:
A minimum eighteen (18) inch vertical separation (outside to outside) must be maintained when the water line is installed over the sanitary or storm sewer line. If the vertical separation cannot be maintained or the water line must be placed under the sanitary or storm sewer line, the sanitary or storm sewer line must be constructed with one of the following or, as shown on these plans:
a) Potable water supply quality material
b) Encasement, with four (4) inch concrete (minimum)
c) Sleeving with potable water supply quality pipe.
Each provision must extend along the sanitary or storm sewer, on either side of the main, a minimum 10 foot distance perpendicular to the water main exterior.
9. Warning tape shall be required over all mains, all six (6) inch diameter and larger service laterals, and any service lateral not installed perpendicular to the main in accordance with Standard Plate No. 27.
10. All water facilities shall be filled, disinfected, pressure tested, flushed, and an acceptable water sample obtained, prior to connection to the LVVWD's distribution system.
11. The contractor must obtain all meters two (2) inches and smaller from LVVWD central stores. Telephone 258-3152 forty-eight (48) hours prior to pickup.
12. Construction may interrupt service, with LVVWD approval and proper notification, between the hours of 10 PM, and 6 AM., Sunday through Thursday. Circumstances may require temporary service feeds be installed, without LVVWD reimbursement. Any temporary service feed must have prior LVVWD approval.
13. All water facility construction materials used must be listed on the LVVWD's PRE-APPROVED Materials and Manufacturers Listing for New Facilities, latest revision, or specifically approved on these plans.
REVISED APRIL 25, 1995

MATCHLINE SEE SHEET NO. 4



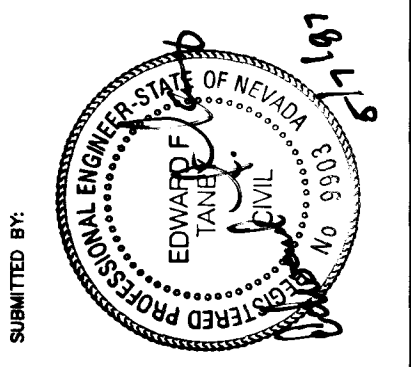
SPRINT TELEPHONE NOTES

NOTE: SPRINT TELEPHONE FACILITIES ENGINEER DEPARTMENT CONTACT COLLEN SMITH AT 244-7878

NOTE: NO WATER COMMITMENT IS IMPLIED OR GRANTED TO THIS PAD/BUILDING PARCEL IN ASSOCIATION WITH THE APPROVAL OF THESE PLANS. ESN.040

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT THE INDIVIDUAL, ON SITE (PRIVATE), PRESSURE REDUCING VALVES BE INSTALLED WHEN EVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPERS RESPONSIBILITY AND WILL NOT BE INSPECTED OR ARE INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES. ESN. 041

Approval table with columns: APPROVED, DATE, REVISION, and a vertical note: THIS SHEET TO BE KEPT AS ORIGINAL. APPROVED SET, CHANGES REFLECT STREETLIGHT RELOCATIONS DUE TO DRIVEWAY ADJUSTMENTS AND TRAFFIC SIGNAL INSTALLATION, RELOCATED CABLE BOX OUTSIDE DRIVEWAY.



ALPHA ENGINEERING COMPANY
50 St. James Blvd., Las Vegas, NV 89107
Telephone: (702) 877-1000

PROJECT: BUFFALO COMMERCIAL
TITLE: MASTER UTILITY PLAN
JOB NO.: 510503
NAME: S.F.C.
DATE: 6 MAY 1997
SCALE: 1" = 40'
PAGE: 5 OF 8

NOTICE! EXISTING UTILITIES ARE SHOWN ON PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR SHOWN INCORRECTLY. Call BEFORE YOU Dig! 1-800-227-2600 UNDERGROUND SERVICE (USA)

DRAWING NO.: UTILITY

